

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A radiation applicator for applying electromagnetic radiation to tissue, the applicator comprising:
an axial central conductor defining an axis and having a distal end and a proximal end, the proximal end being adapted to be coupled to a source of electromagnetic radiation;
an outer conductor having a distal end and a proximal end, the outer conductor surrounding the central conductor and being insulated therefrom;
an elongate dielectric tip member surrounding an axial part of said central conductor at said distal end thereof, the elongate dielectric tip member having a proximal end portion;
a metal ferrule having a distal end portion attached to said proximal end portion of the dielectric tip member and surrounding a portion of the central conductor and extending parallel thereto along a length thereof, the ferrule having a proximal end attached to the distal end of said outer conductor, wherein said distal end portion of the ferrule extends into and is surrounded by said proximal end portion of the dielectric tip member, whereby a radiating dipole is formed, in use, for radiating electromagnetic energy in at least a radial direction from said dielectric member.
2. (Previously Presented) The applicator of claim 1, wherein the distal end portion of the ferrule and the dielectric tip member have respective elongate cooperating surfaces and wherein the ferrule and the dielectric member are fixed to each other with said cooperating surfaces in close abutment, thereby providing a rigid structure.
3. (Original) The applicator of claim 2, wherein the cooperating surfaces include respective radially extending cooperating surfaces.

4. (Previously Presented) The applicator of claim 2, wherein the cooperating surfaces include respective annular cooperating surfaces.

5. (Currently Amended) The applicator of claim 1, further comprising:
a disc shaped tuning conductor, attached to the central conductor and in electrical contact therewith;
wherein the shape and dimensions of the tuning conductor, and the shape and dimensions of the dielectric tip member, are predetermined ~~whereby a~~ to form said radiating dipole ~~is formed, in use, for radiating electromagnetic energy in at least a radial direction from said dielectric member.~~

6. (Previously Presented) The applicator of claim 1, further comprising:
an elongate metal tube surrounding a portion of the central and outer conductors, said tube being spaced apart from the distal end of the central conductor which is surrounded by the dielectric tip member;
wherein the proximal end of the ferrule is fixedly attached to the metal tube; and wherein the central conductor and outer conductors respectively comprise the inner and outer conductor of a cable extending within the metal tube, an elongate annular space being defined between the cable and the metal tube so as to permit the passage of cooling fluid to the proximal end of the ferrule.

7. (Original) The applicator of claim 6, wherein at least one set of holes is provided in the tube, each hole extending through the wall of the tube, thereby providing conduits for the flow of fluid between the annular space and the exterior of the applicator.

8. (Original) The applicator of claim 7, wherein the holes extend radially.

9. (Previously Presented) The applicator of claim 7, wherein 1 to 4 holes per set are provided.

10. (Previously Presented) The applicator of claim 7, wherein the holes are diametrically opposed.

11. (Previously Presented) The applicator of claim 7, wherein two or more sets of holes are provided, and the sets of holes are spaced apart axially.

12. (Previously Presented) The applicator of claims 7, wherein the holes are 0.1 to 0.6 mm in diameter.

13. (Previously Presented) The applicator of claim 7, wherein the holes are disposed a minimum of 3 to 50 mm from the end of the tube that abuts the ferrule.

14. (Previously Presented) The applicator of claim 1, wherein the dielectric tip member is formed with an end blade, whereby the blade has a dimension of elongation transverse to said axis.

15. (Currently Amended) The applicator of claim 1, wherein the external diameter of the dielectric tip member, the ferrule and/or the metal tube, is less than 2.5 mm.

16. (Canceled)

17. (Currently Amended) A radiation applicator for applying electromagnetic radiation to tissue, the applicator comprising:

an axial central conductor defining an axis and having a distal end and a proximal end, the proximal end being adapted to be coupled to a source of electromagnetic radiation;

an outer conductor having a distal end and surrounding the central conductor and being insulated therefrom;

an elongate dielectric tip member surrounding an axial part of said central conductor which extends distally beyond the distal end of said outer conductor, the elongate dielectric tip member having a proximal end portion, wherein a metal member is attached at the distal end thereof to said proximal end portion of the dielectric tip member, said metal member surrounding a portion of said central conductor and extending parallel thereto along a length thereof, said distal end portion of the member extending into and being surrounded by said proximal end portion of the

dielectric tip member, whereby a radiating dipole is formed, in use, for radiating electromagnetic energy in at least a radial direction from said dielectric member.